

CLAIMS:

1. Method for enhancing brightness and contrast in images provided by a projection-based presenter utilising a display panel (5) illuminated by at least one scrolling band of light and a lamp (3) as a light source for said at least one scrolling band of light, wherein said method comprises modulating the light output of said lamp (3) between
5 different scrolling positions in a way that a higher light intensity is supplied by said lamp (3) when parts of said display panel (5) currently representing brighter parts of a respective image are illuminated by said at least one scrolling band of light than when parts of said display panel (5) currently representing less bright parts of said image are illuminated by said at least one scrolling band of light.

10 2. Method according to claim 1, wherein the average light intensity over time supplied by said lamp (3) for an entire image is kept constant.

15 3. Method according to claim 1 or 2, wherein said projection-based presenter utilises at least one vertically scrolling band of light, and wherein the light intensity supplied by said lamp (3) is adjusted for each horizontal line.

20 4. Method according to one of the preceding claims, wherein said display panel (5) is illuminated by three scrolling bands of light of different colours.

5. Method according to one of the preceding claims, wherein said light output of said lamp (3) is modulated by varying the power supplied to said lamp (3).

25 6. Method according to one of the preceding claims, wherein said display panel (5) comprises adjustable apertures arranged in a matrix of rows and columns, and wherein changing fractions of said rows are illuminated by said at least one scrolling band of light.

7. Method according to claim 6, wherein the maximum aperture in each of said rows is adjusted to 100%, and wherein the other apertures of each of said rows are adapted such that a non-distorted brightness reproduction is maintained in each row.

5 8. Method according to claim 6, comprising:

- determining the maximum brightness of an image that is to be projected in each scrolling position;
- adjusting the apertures of said display panel (5) for each scrolling position in accordance with said image in a way that the maximum aperture is 100%;
- 10 - determining for each scrolling position the relative power which has to be provided to said lamp (3) for achieving said determined maximum brightness with said maximum aperture of 100% while maintaining the relation to the brightness of the other image parts;
- scaling the overall power level such that the average power of the lamp
- 15 corresponds to a rated power level.

9. Projection based presenter utilising a display illuminated by at least one scrolling band of light, which presenter comprises means (2,3,4,5,6,8) for carrying out the steps of one of the preceding claims.

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10. Projection based presenter according to claim 9 comprising

- a display panel (5) with adjustable apertures arranged in horizontal lines;
- a lamp (3) for providing light for a projection;
- power supply means (1,2) for providing said lamp (3) with an adjustable
- 25 power;
- a scanner (4) for directing said light output by said lamp (3) to said display panel (5) in subsequent horizontal bands;
- a lens (6) for projecting an image provided by said display panel (5); and
- an image processor (8) for receiving an image that is to be projected and for
- 30 controlling the power supply (2) to said lamp (3) and the size of said adjustable apertures of said display panel (5) according to a received image.

11. Projection based presenter according to claim 9 or 10, wherein said lamp is a high pressure gas discharge lamp (3).

12. Image processor (8) for a projection-based presenter utilising a display panel (5) illuminated by at least one scrolling band of light and a lamp (3) as a light source for said at least one scrolling band of light, said image processor (8) comprising means for controlling the power supply to said lamp (3) for different scrolling positions in a way that a higher light intensity is supplied by said lamp (3) when parts of said display panel (5) currently representing brighter parts of a respective image are illuminated by said at least one scrolling band of light than when parts of said display panel (5) currently representing less bright parts of said image are illuminated by said at least one scrolling band of light.

13. Regulation and controlling system for a projection-based presenter utilising a display panel (5) illuminated by at least one scrolling band of light and a lamp (3) as a light source for said at least one scrolling band of light, said regulation and controlling system comprising an image processor (8) determining the power which has to be supplied to said lamp (3) for different scrolling positions in order that a higher light intensity is supplied by said lamp (3) when parts of said display panel (5) currently representing brighter parts of a respective image are illuminated by said at least one scrolling band of light than when parts of said display panel (5) currently representing less bright parts of said image are illuminated by said at least one scrolling band of light, and said regulation and controlling system further comprising a lamp power regulator (2) supplying said lamp (3) with power, which lamp power regulator (2) adjusts the power supplied to said lamp (3) according to the respectively required power determined by said image processor (8).